




1.5 Amp. Surface Mount Ultrafast Recovery Avalanche Rectifier

DO-214AC (SMA) 	Voltage 200 to 600 V	Current 1.5 A	 FEATURES <ul style="list-style-type: none"> • Low profile package • Ideal for automated placement • Ultrafast recovery time for high efficiency • Low power losses • Low forward voltage drop • High forward surge current capability • Solder dip 260°C, 10s • AEC-Q101 qualified • Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC • Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C 
	MECHANICAL DATA		
	TYPICAL APPLICATIONS		
	Used in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer, computer, automotive and telecommunication.		

Maximun Ratings and Electrical Characteristics at 25°C

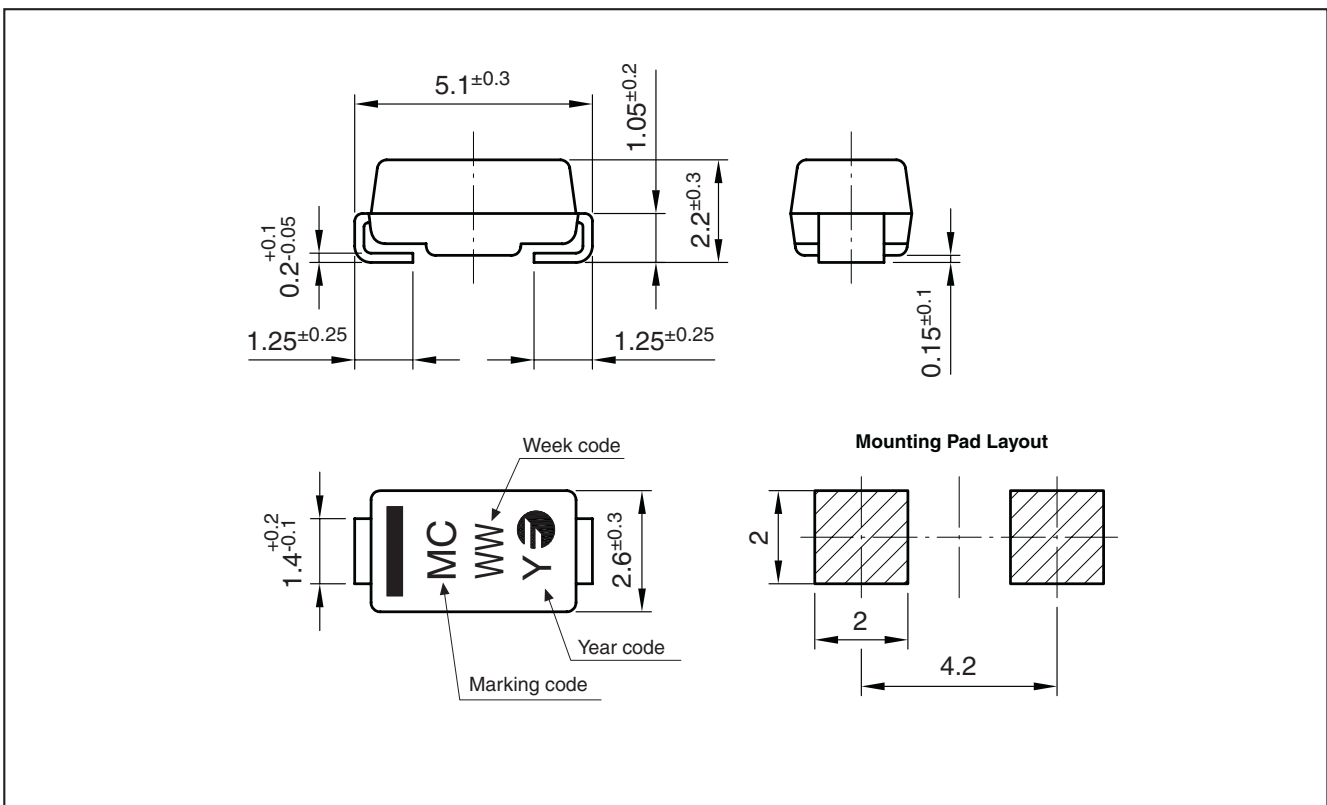
		BYG20D	BYG20G	BYG20J
Marking Code		3V	3Y	3Z
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600
V_{RMS}	Maximum RMS Voltage (V)	140	280	420
V_{DC}	Maximum DC Blocking Voltage (V)	200	400	600
$I_{F(AV)}$	Forward current at $T_C = 110^\circ C$	1.5 A		
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	30 A		
V_F	Maximum Instantaneous Forward Voltage $I_F = 1.0A$ $I_F = 1.5A$	1.3 V 1.4 V		
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage $T_j = 25^\circ C$ $T_j = 125^\circ C$	1 μA 30 μA		
T_{rr}	Maximum Reverse Recovery Time (0.5/1/0.25A)	75 ns		
C_j	Typical Junction Capacitance (1MHz; -4V)	8 pF		
$R_{th(j-c)}$	Maximum Thermal Resistance	27 °C/W		
$R_{th(j-a)}$	(5x5 mm ² x 130 μ Copper Area)	75 °C/W		
$T_j - T_{stg}$	Operating Junction and Storage Temperature Range	-55 to + 150 °C		
E_{RSM}	Maximum non repetitive peak reverse Avalanche Energy $T_j = 25^\circ C$, $I_{(BR)R} = 1A$	20 mJ		

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Ordering information

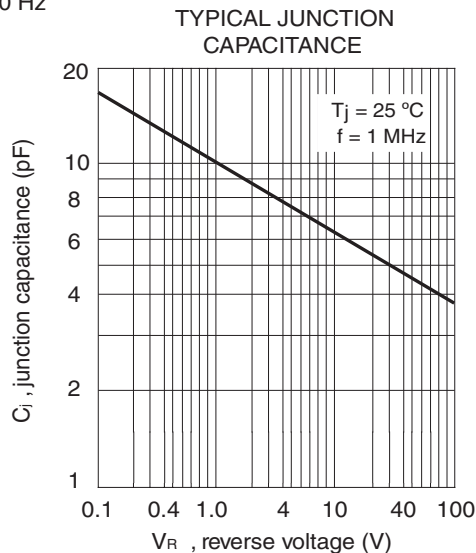
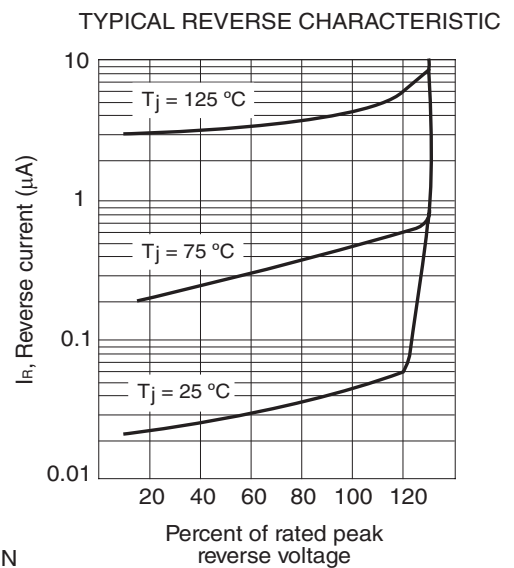
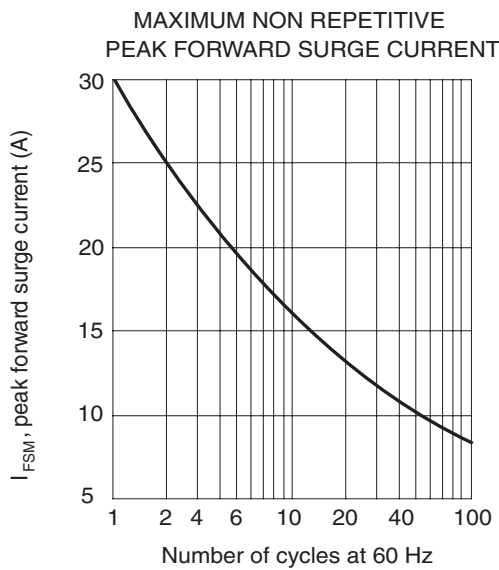
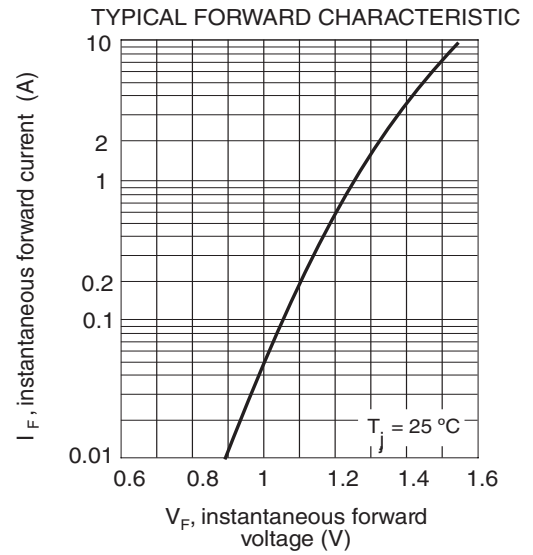
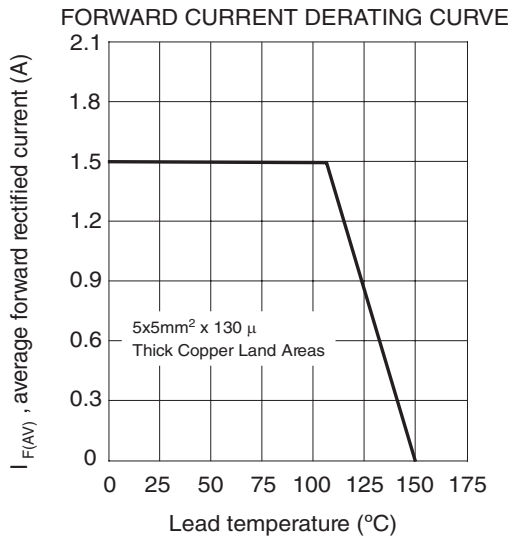
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
BYG20G TRTB	TRTB	13" diameter tape and reel	7,500	0.060

Package Outline Dimensions: (mm) DO-214AC (SMA)



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Ratings and Characteristics (Ta 25 °C unless otherwise noted)



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Revision History

Date	Revision	Description of Changes
14-Mar-2014	0	Original Data Sheet
9-Sep-2015	1	Modified Typical Forward Characteristic

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